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19. ABSTRACT (Continue on reverse if necessary and identify by block number)					
This POP report is for 105mm Howitzer Ammunition, which is packaged 2 cartridges per MIL-B-2427 wood box. This report describes the results of testing for this item.					
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> 94-05668 </div> <div>DTIC USERS</div> </div>					
20 DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS			21 ABSTRACT SECURITY CLASSIFICATION Unclassified		
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I. REPORT NUMBER: DOD POP HMTR/AYD 94-001

II. TITLE: Performance Oriented Packaging Report for 105mm Howitzer Ammunition

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PERFORMING ACTIVITY: ARDEC

ADDRESS: Department of the Army
ARDEC, SMCAR-AEP
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A-1	

1. DATA SHEET

CONTAINER

Type: Box

UN Code: 4C1

Nomenclature: BOX, PACKING, AMMUNITION, FOR 105MM HOWITZER
AMMUNITION IN FIBER CONTAINER, M105A3

BOX, PACKING, AMMUNITION FOR 105MM HOWITZER
AMMUNITION WITHOUT FUZE IN FIBER CONTAINER,
PA55

Specification Number: Type II, Grade A, Class 5, Mil-B-2427

Drawing Number: 7549072 and 9271047

Material: Wood

Gross Weight: 146 pounds

Outside Dimensions: 37 1/4" x 11 15/16" x 7 19/32"

Inside Dimensions: 32" x 10 3/8" x 5 1/4"

PRODUCT

Name: 105MM Howitzer Cartridges

Drawing Number: N/A

United Nations Number: Various

Physical State: Solid

Amount per Container: 2 - 105mm Howitzer Cartridges

2. BACKGROUND, TESTS, AND RESULTS

Reference the following document:

a. 49 CFR, October 1, 1993 Edition

A Stacking Test was conducted on three containers with a weight of 2,325 pounds per container for 24 hours. This weight exceeds the minimum requirement for a 10' stack height which is 2,178 pounds.

A Loose Cargo Test was conducted on three containers for one hour. The packages were tested at a vibration table frequency such that the bottom of the packages were raised 1/4" from the platform, which exceeds the requirement of 1/16".

A Seven Foot Drop Test was conducted on three containers that were subjected to 6, three foot drops, and the Loose Cargo Test. The three containers were dropped twice at seven feet covering the following orientations: top, bottom, long side, short side, and a top corner at the closure. This exceeds the requirement of one drop per container at four feet.

Test results indicated no leakage or spillage of the contents from the containers following any of the tests conducted, meeting the requirements of the 49 CFR.